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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,812	08/19/2003	Stephen W. Decker	14235	4778
7590	07/19/2005		EXAMINER LU, TONY W	
Sally J. Brown Autoliv ASP, Inc. 3350 Airport Road Ogden, UT 84405			ART UNIT 2878	PAPER NUMBER

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H'A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/643,812	DECKER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tony Lu	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-32 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/02/2005.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,8,12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferren US4584704.

With respect to claims 1-4,8,12 and 13, Ferren discloses an imaging system comprising: a lens(12) having an aperture having an f-stop number of 1.4(col.7); an electronic imaging element(61) having a predetermined pixel size; the f-stop number and the predetermined pixel size are jointly selected to create a range of depth of field of 0.9m- 2.43m, (see fig.8) where objects(81,83) at a distance of 3 feet(0.9m)- 8 feet(2.43m) are in focus, and thus, the lens(12) is a wide angle lens; and the rear depth of field is in the range from about .1m to about 1m; a signal processor(22) configured to discriminate between objects in the depth of field and out of the depth of field based on the image sharpness and blur(col.2-4).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-11,14-16 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferren US4584704.

With respect to claims 9-11,14-16 and 19-23, per the above discussion, Ferren fails to specify a pixel size in the range from about 2 $\mu$ m to about 6 $\mu$ m.

Although Ferren fails to specify a specific range and/or a pixel size, selecting a specific range and/or a pixel size would have been obvious to one of ordinary skill in the optics art in order to provide a compact design of the imaging system.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ferren accordingly in order to provide a desired compact design of the imaging system.

Claims 5-7, 17,18 and 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferren US 4584704 in view of Fraering, Jr. et al US5936664.

With respect to claims 5-7 per the above discussion, Ferren fails to disclose a focal length in the range about 3mm to about 14mm.

Fraering, Jr. et al disclose an imaging system having a wide angle lens(5) with a focal length between 3.5mm and 12mm.

Although Ferren lacks a clear teaching of a focal length in the range about 3mm to about 14mm, selecting a specific focal length range and/or a focal length would have been obvious to one of ordinary skill in the optics art in order to provide an optimum viewing range of the imaging system.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the imaging system of Ferren by replacing the lens(12) with the wide angle lens(5) having a focal length between 3.5mm and 12mm taught by Fraering, Jr. et al in order to provide a better imaging field of the imaging system .

With respect to claims 17 and 18, the further citations in the claims would have been obvious to one of ordinary skill in the art at the time of the invention to modify the proposed system, discussed in the rejection of claims 9-11,14-16 and 19-23 above, for similar reasons set forth above.

With respect to claims 24-32, the further citations in the claims would have been obvious to one of ordinary skill in the art at the time of the invention to modify the proposed system, discussed in the rejection of claims 5-7 and 9-11,14-16, 19-23 above, for similar reasons set forth above.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Zhang US6456261B1 discloses a wide angle lens having a focal length of 18mm and an f-stop number 1.0; a detector with a pixel size; and a depth of field of 1m to infinity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Lu whose telephone number is 5712728448. The examiner can normally be reached on M-F 9:00am- 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Davide Porta can be reached on 5712722444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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